|     | Туре | L  | # | Hits  | Search Text  | DBs                        | Time<br>Stamp        | Comment                               |
|-----|------|----|---|-------|--|----------------------------|----------------------|---------------------------------------|
| 1   | BRS  | L1 |   | 20752 | (scan\$4 or read\$3<br>sens\$3 or<br>detect\$4)same(lens\$2)s<br>ame(nois\$6 or<br>distort\$4 or shad\$4 or<br>error\$2) | <b> </b> ;                 | 2004/11/1<br>1 06:55 |                                       |
| 2   | BRS  | L2 |   | 7022  | 1 same(correct\$4 or<br>enhanc\$6 or classif\$6<br>or remov\$4 or<br>cancel\$3)  | US-<br>PGPUB<br>;<br>USPAT | 2004/11/1<br>1 06:35 |                                       |
| 3   | BRS  | Ь3 |   | 8503  | correct\$4 or enhanc\$6 or classif\$6 or   | US-<br>PGPUB<br>;<br>USPAT | 2004/11/1<br>1 06:36 |                                       |
| 4   | BRS  | L4 |   | 828   | 3 same(color\$2 or colour\$2 or RGB\$2)  | US-<br>PGPUB<br>;<br>USPAT | 2004/11/1<br>1 06:58 | -                                     |
| 5   | BRS  | L5 | • | 2240  | segments6 or divids3 or partitions3 or regions3  | US-<br>PGPUB<br>;<br>USPAT | 2004/11/1<br>1 06:58 |                                       |
| 6 . | BRS  | L6 |   | 229   | 5 same(color\$2 or<br>colour\$2 or RGB\$2)   |                            | 2004/11/1<br>1 06:38 | · · · · · · · · · · · · · · · · · · · |
| 7   | BRS  | L7 |   | 63    | analyz\$6 or comput\$6 or measur\$6)   | US-<br>PGPUB<br>;<br>USPAT | 2004/11/1<br>1 06:59 |                                       |
| 8   | BRS  | L8 |   | 37    | o same(associat\$6 or compar\$6 or correlat\$5)  | US-<br>PGPUB<br>;<br>USPAT | 2004/11/1<br>1 06:58 |                                       |
| 9   | BRS  | L9 |   | 45    | 6 same(associat\$6 or compar\$6 or correlat\$5 or match\$3)  | US-<br>PGPUB<br>;<br>USPAT | 2004/11/1<br>1 06:39 |                                       |

|    | Туре | L # | Hits | Search Text  | DBs                        | Time<br>Stamp        | Comment |
|----|------|-----|------|--|----------------------------|----------------------|---------|
| 10 | BRS  | L10 | 21   | 9 same(calculat\$6 or<br>analyz\$6 or comput\$6<br>or measur\$6)   | US-<br>PGPUB<br>;<br>USPAT | 2004/11/1<br>1 06:53 | ,       |
| 11 | BRS  | L11 | 1    | "5978106".PN.  | USPAT<br>;<br>USOCR        | 2004/11/1<br>1 06:47 |         |
| 12 | BRS  | L12 | 1    | "5978106".PN.  | USPAT<br>;<br>USOCR        | 2004/11/1<br>1 06:48 |         |
| 13 | BRS  | L13 | 1    | "5831672".PN.  | USPAT<br>;<br>USOCR        | 2004/11/1<br>1 06:48 |         |
| 14 | BRS  | L14 | 1    | "5719661".PN.  | USPAT<br>;<br>USOCR        | 2004/11/1            |         |
| 15 | BRS  | L15 | 2    | "5818523"  | 1                          | 2004/11/1<br>1 06:53 |         |
| 16 | BRS  | L16 | 3076 | (lens\$2 near10( exchang\$3 or mov\$6 or alter\$3 or zoom\$3))same(nois\$6 or distort\$4 or shad\$4 or error\$2)same(enhanc\$6 or correct\$4 or filter\$3 or remov\$6) | <b>;</b>                   | 2004/11/1<br>1 06:57 |         |
| 17 | BRS  | L17 | 229  | 16 same(color\$2 or<br>colour\$2 or RGB\$2)  |                            | 2004/11/1<br>1 06:58 |         |
| 18 | BRS  | L18 | 75   | or partition\$3 or   | US-<br>PGPUB<br>;<br>USPAT | 2004/11/1<br>1 06:58 |         |

|    | Туре | L # | Hits- | Search Text                                     | DBs                 | Time<br>Stamp        | Comment |
|----|------|-----|-------|---|---------------------|----------------------|---------|
| 19 | BRS  | L20 | 17    | 18 same(calculat\$6 or analyz\$6 or comput\$6   |                     | 2004/11/1<br>1 06:59 |         |
| 20 | BRS  | L19 | 5     | 18 same(associats6 or compar\$6 or correlat\$5) |                     | 2004/11/1<br>1 07:00 |         |
| 21 | BRS  | L21 | 1     | "6300974".PN.                                   | USPAT<br>;<br>USOCR | 2004/11/1<br>1 07:01 |         |
| 22 | BRS  | L22 | 1     | "6219442".PN.                                   | USPAT<br>;<br>USOCR | 2004/11/1            |         |
| 23 | BRS  | L23 | 1     | "6173087".PN.                                   | USPAT<br>;<br>USOCR | 2004/11/1<br>1 07:01 |         |

|   | Error<br>Definition | Err |
|---|---------------------|-----|
| 1 |                     |     |
| 2 |                     |     |
| 3 |                     |     |
| 4 |                     |     |
| 5 |                     |     |
| 6 |                     |     |
| 7 |                     |     |
| 8 |                     |     |
| 9 |                     |     |

|    | Error<br>Definition | Err |
|----|---------------------|-----|
| 10 |                     |     |
| 11 |                     |     |
| 12 |                     |     |
| 13 |                     |     |
| 14 |                     |     |
| 15 |                     |     |
| 16 |                     |     |
| 17 |                     |     |
| 18 |                     |     |

|    | Error<br>Definition | Err<br>ors |
|----|---------------------|------------|
| 19 |                     |            |
| 20 |                     |            |
| 21 |                     |            |
| 22 |                     |            |
| 23 |                     |            |



## **Results Key:**

JNL = Journal or Magazine CNF = Conference STD = Standard

## 1 An embedded camera lens distortion correction method for mobile computing applications

Wonpil Yu;

Consumer Electronics, IEEE Transactions on , Volume: 49 , Issue: 4 , Nov. 2003 Pages:894 - 901

### **IEEE JNL**

## 2 A fast parametric motion estimation algorithm with illumination and lens distortion correction

Altunbasak, Y.; Mersereau, R.M.; Patti, A.J.;

Image Processing, IEEE Transactions on , Volume: 12 , Issue: 4 , April 2003

Pages:395 - 408

#### **IEEE JNL**

## 3 Implementation, calibration and accuracy testing of an image-enhanced endoscopy system

Shahidi, R.; Bax, M.R.; Maurer, C.R., Jr.; Johnson, J.A.; Wilkinson, E.P.; Bai Wang; West, J.B.; Citardi, M.J.; Manwaring, K.H.; Khadem, R.;

Medical Imaging, IEEE Transactions on , Volume: 21 , Issue: 12 , Dec. 2002

Pages:1524 - 1535

### **IEEE JNL**

# <sup>4</sup> True multi-image alignment and its application to mosaicing and lens distortion correction

Sawhney, H.S.; Kumar, R.;

Pattern Analysis and Machine Intelligence, IEEE Transactions on , Volume: 21 , Issue:

3 , March 1999

Pages:235 - 243

### **IEEE JNL**

## 5 Correction of geometric lens distortion through image warping

Lucchese, L.; Mitra, S.K.;

Image and Signal Processing and Analysis, 2003. ISPA 2003. Proceedings of the 3rd International Symposium on , Volume: 1 , 18-20 Sept. 2003 Pages:516 - 521 Vol.1

## IEEE CNF

## 6 A calibration-free lens distortion correction method for low cost digital imaging

Wonpil Yu; Yunkoo Chung;

Image Processing, 2003. Proceedings. 2003 International Conference on , Volume:

h eee e eee g e ch ch e e e h

1, 14-17 Sept. 2003 Pages:I - 813-6 vol.1

### **IEEE CNF**

## 7 Computer vision system for tracking players in sports games

Pers, J.; Kovacic, S.;

Image and Signal Processing and Analysis, 2000. IWISPA 2000. Proceedings of the First International Workshop on , 14-15 June 2000

Pages:177 - 182

### **IEEE CNF**

## 8 FlyCam: practical panoramic video and automatic camera control

Foote, J.; Kimber, D.;

Multimedia and Expo, 2000. ICME 2000. 2000 IEEE International Conference

on, Volume: 3, 30 July-2 Aug. 2000

Pages:1419 - 1422 vol.3

### **IEEE CNF**

## 9 True multi-image alignment and its application to mosaicing and lens distortion correction

Sawhney, H.S.; Kumar, R.;

Computer Vision and Pattern Recognition, 1997. Proceedings., 1997 IEEE Computer Society Conference on , 17-19 June 1997

Pages: 450 - 456

### **IEEE CNF**

## 10 Fast correction of lens distortion for image applications

Fernandes, J.C.A.; Ferreira, M.J.O.; Neves, J.A.B.C.; Couto, C.A.C.;

Industrial Electronics, 1997. ISIE '97., Proceedings of the IEEE International Symposium

on , Volume: 2 , 7-11 July 1997

Pages: 708 - 712 vol.2

### **IEEE CNF**

## 11 A Hough transform-based method for radial lens distortion correction

Cucchiara, R.; Grana, C.; Prati, A.; Vezzani, R.;

Image Analysis and Processing, 2003. Proceedings. 12th International Conference on , 17-19 Sept. 2003

Pages:182 - 187

#### **IEEE CNF**

## 12 An embedded camera lens distortion correction method for mobile computing applications

Wonpil Yu; Yunkoo Chuna:

Consumer Electronics, 2003. ICCE. 2003 IEEE International Conference on , 17-19 June

2003

Pages:400 - 401

### **IEEE CNF**

## 13 A new algorithm to correct fish-eye- and strong wide-angle-lens-distortion from single images

Brauer-Burchardt, C.; Voss, K.; Image Processing, 2001. Proceedings. 2001 International Conference on , Volume: 1 , 7-10 Oct. 2001
Pages: 225 - 228 vol.1

### **IEEE CNF**

## 14 On global parametric motion estimation with lens distortion correction

Altunbasak, Y.; Patti, A.J.; King, O.D.;

Image Processing, 1999. ICIP 99. Proceedings. 1999 International Conference

on, Volume: 3, 24-28 Oct. 1999

Pages:686 - 690 vol.3

#### **IEEE CNF**

## 15 Distortion correction for digital cameras

Yung-Chieh Lin; Chiou-Shann Fuh; Computer Graphics, Image Processing, and Vision, 1998. Proceedings. SIBGRAPI '98. International Symposium on , 20-23 Oct. 1998 Pages: 396 - 401

### **IEEE CNF**